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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,374

03/25/2004

Yi Yeol Lyu

6661-000041/US

4754

30593

7590

02/03/2010

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EXAMINER

ZEMEL, IRINA SOPJIA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

02/03/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,374	<b>Applicant(s)</b> LYU ET AL.	
	<b>Examiner</b> Irina S. Zemel	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,11,13 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,11,13 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1-14-2010</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 67, 11, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,623,711 to Lyu et al., (hereinafter "Lyu") in combination with JP 2002-107932 to Toray Ind. Inc., (hereinafter "Toray").

The rejection stands as per reasons of record.

The Toray reference, similarly to the applicants disclosure, discloses use of photoacid generators and photobase generators in the alternative. However, to the extent that should the invention be operable using both types of catalysts generators, use of two different generators, i.e., a photobase and a photoacid generators (each of which fully correspond to the claimed respective generators as discussed above) in the compositions of Lui would have been obvious with reasonable expectation of adequate and cumulative results since each one is disclosed in Toray as a functional equivalent of the other usable for curing the same siloxane based compositions.

Comparative examples in the instant application are noted, however the results are considered to be unexpected as the compositions lacking photo catalyst generator are expected to be incompletely cured at the conditions of the experiment, thus exhibiting inferior elasticity properties.

***Response to Arguments***

Applicant's arguments filed 11-12-2009 have been fully considered but they are not persuasive. The applicants argue that the combination of the two cited references does not disclose the composition for forming a porous dielectric film, and therefore, fails to teach each and every element of the claimed invention.

The applicants further argue that Toray reference does not teach compositions for forming porous films and further the applicants go to great extend to discuss the disclosure of Toray and how it is different from the claimed invention. It is noted on the record, that not a single phrase (with the exception of the introduction phrase that the "combination of Lyu and Toray does not disclose or teach the composition for forming a porous dielectric film claimed in Claim 1, and therefore fails to teach all elements of the instant claims, and further, fails to provide a suggestion or incentive that would lead one skilled in the art to use a acid generator or a base generator disclosed therein to provide a composition for forming a porous dielectric film." Addresses the disclosure and the teachings of the primary reference. i.e., Lyu. The rejection was NOT made over the disclosure of Toray, or for that matter over Lyu by itself. The rejection was clearly made over the combined teachings of the two references.

It is well established by the court that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

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1986). It is especially so, when the applicants do not even discuss the teachings of the primary reference in their arguments. As discussed in the previous office action, it is the primary reference that discloses each and every element of the claimed invention with the exception of specifically claimed condensation catalyst. The proposed modification of the primary reference was in view of the teachings of Toray. Contrary to applicants arguments, there was no proposition to modify Toray to arrive to the claimed invention, or for that matter, use any portion of Toray's teaching to modify Lyu other than relevant teachings that the catalysts as claimed are known for its ability to catalyze curing of siloxane based compositions substantially similar to compositions of Lyu. It is irrelevant to the rejection whether or not compositions of Toray are used for a specific purpose of making dielectric films or anything else. The only portion of Toray's teachings relied upon was the teaching that siloxane based compositions can be cured by using a specific catalyst. The chemistry of curing is expected to be the same regardless of final physical use of the compositions or form of the final product. The catalytic effect of the claimed catalyst is still expected by an ordinary artisan to be the same for substantially similar reaction and reactants.

Therefore, as discussed in the previous office action, modification of the teachings of Lyu (the primary reference) in view of the teachings of Toray would have been obvious for an ordinary artisan. Once again, this is the only relevant portion of teachings of Toray relied upon by the examiner in the rejection, and the Toray reference was NOT modified or proposed to be modified in the rejection in any way.

Therefore, the arguments regarding the outstanding rejection are not convincing and the rejection stands as per reasons of record.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/  
Primary Examiner, Art Unit 1796

Irina S. Zemel  
Primary Examiner  
Art Unit 1796

ISZ